

## ABC'S OF BONE HEALTH FOR MENOPAUSAL WOMEN

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Menopause means graduation! One year has passed since the last menstrual period and perimenopause is over. Because of the hormonal changes of the first few years after menopause, bone renovation is more rapid and risks for bone loss are greater. It is time to begin or continue the habits that will keep bones healthy for the rest of our lives.

Bone health is influenced by how we live our lives. Below are the many practical things you can do (with the help of your health care provider) to prevent osteoporosis (the problem of weak and fragile bones).

### “A” IS FOR “ACTIVE”

Bones gain strength through forces they “feel” from muscular work or gravity. Exercise certainly is important to prevent bone loss. Although in general exercise can't build much bone after our teen years, bones are probably stronger in those who regularly do some activity. Exercise is also good for whole body health. Therefore aim for at least a half-hour of walking daily. Harder aerobic exercise will help the heart.

### “B” IS FOR “BRAWNY”

Weight gain, no matter how much we abhor it, is normal in midlife and this gain will usually persist following menopause. Thinner women lose bone more rapidly after menopause. Muscle weight, in particular, is good for bones. Exercise can maintain *muscle* weight and decrease waistline expansion. Remember, eight loss, no matter how careful, will cause increased bone loss.

### “C” IS FOR “CALCIUM”

Calcium is not only the building block for bone but also ensuring high but safe amounts can prevent bone loss. Women after menopause are recommended to have 1200 mg of “elemental” calcium each day. (Be sure to read labels). Those with a family history of osteoporosis or low bone density probably need 1500 to 2000 mg a day. Each high-calcium food (1-cup [250-ml] milk and other supplemented beverages,  $\frac{3}{4}$  c. yogurt or hunk of cheese) contains 300 mg of calcium. Calcium needs to be spread out. The body cannot use more than about 500 mg at a time. Take calcium in food or supplements with each meal and at bedtime. If five or six high-calcium foods per day are not practical, replace food with supplemental calcium, also taken with meals and at bedtime.

### “D” IS FOR “VITAMIN D”

Vitamin D is in some foods and can be made in sun-exposed skin. Everyone needs 200 IU a day and 400 IU a day is practical through the dark winter. Vitamin D is a

safe way to prevent bone loss—800 or 1000 IU a day is appropriate in the years after menopause. That can be achieved with a multiple-vitamin and a 400 IU pill or by a single 1000 IU pill. Vitamin D is stored in fat and can be taken all at once.

### “E” IS FOR “EASY GOING”

Does feeling good about your value and your future help bones? Yes! High stress hormones, such as cortisol, cause bone loss. Cortisol levels also increase with hot flushes and night sweats. If nights are chronically interrupted with night sweats and days are troubled by hot flushes, seek treatment. Learning and practicing relaxation will help. Sharing with friends, preparing for the future and taking care of yourself will help decrease stress and protect bone health.

### “F” IS FOR “BONE FORMATION”

Bone balance requires new bone formation by osteoblast cells. Osteoblasts work slowly and after growth often do not keep up with normal bone loss. Progesterone, the natural hormone made after ovulation (egg release) stimulates osteoblasts to build bone. Bone formation is decreased after menopause because progesterone levels are lower. If low bone density is already present daily progesterone treatment may be needed. Progesterone will also effectively treat hot flushes and night sweats.

### “G” AND “H” ARE FOR “GOOD HABITS”

That means regular meals and sleep, not smoking and drinking no more than 2 caffeine-containing drinks a day (coffee or colas). Cigarettes, in addition to being addicting, cause lower weights and bone loss. Excess caffeine causes calcium loss.

### “I” MEANS “INHIBIT BONE RESORPTION”

Bone is renovated by osteoclast cells that remove old bone to make way for new. Osteoclasts work faster than osteoblasts—this causes net bone loss. With a family history of osteoporosis, or low bone density at the time of menopause, doing “A” through “H” may not be sufficient to prevent osteoporosis. A bisphosphonate medication called etidronate is effective for prevention. It can be taken in the middle of the night for two weeks of every 3-months. Hormonal therapies to prevent bone loss include estrogen (this would be appropriate only if you are also having disturbing hot flushes) and nasal calcitonin. For osteoporosis treatment, stronger medicine may be needed.

Dr. Jerilynn C. Prior, MD  
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